

REMARKS

Support for the diphenols recited in Claim 22 is found in page 4, line 16 to page 6, line 13. Claim 23 finds support in page 13, lines 19 et. Seq.

Claim 22 differs from the cancelled Claim 15 (and cancelled 16) in that it specifies the diphenols that define the molecular structure of the recited polycarbonate.

The finality of the Office Action is respectfully traversed as the Examiner failed to act on Claim 21 - pages 4-6- of the previously filed amendment. Entry and consideration of the present amendment are requested.

The invention is directed to a molding composition that contains polycarbonate, a graft polymer, a mixture of phosphorous compounds and fluorinated polyolefin.

The claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kakegawa et al, U.S. Patent 5,455,292 (Kakegawa); Lee et al, U.S. Patent 5,674,924 (Lee) or Cheil Industries (EPO731,140) in view of Wittman et al, U.S. Patent 5,061,745 (Wittman), Fuhr et al, U.S. Patent 5,157,065 (Fuhr), Podszun et al, U.S. Patent 5,733,957 (Podszun) or Serini, U.S. Patent 4,172,103 (Serini).

The primary references disclosed relevant elements of the presently claimed composition. The secondary references are said by the Examiner to disclose that the properties of the fluoropolymer presently claimed is routinely used in flame retardant polycarbonate compositions.

Serini, that disclosed polycarbonates that contain structural units derived from alkyl substituted diphenols was indicated by the Examiner to have disclosed a key element of the presently claimed invention, namely the particle size of graft copolymers, a size which encompasses the presently claimed range.

In view of the present amendment that restricts the claimed invention in terms of the structure of the included polycarbonate, the Serini document is believed avoided.

Moreover, Serini's paragraph overlapping columns 5 and 6 note that high weld line strength is obtained if the rubber particles are very irregular in size and shape as exemplified in Serini's Example 10. Similarly, such strength is noted for Mo-5383


rubber particles in network form "as in the case of solvent-free bead graft polymerization" as in Example 10. Lastly, the paragraph refers to Example 10 yet again as demonstrating advantages resulting from rubber distributed in the form of agglomerates. Since the compositions included in Example 10 are all based on a methyl-substituted polycarbonate, a specie that is excluded from the instant invention, this paragraph is believed to have no present probative value. Furthermore, Applicants call attention to Examples "e" through "h" in the table in Serini's column 19 where compositions that include polycarbonate based on tetramethylated bisphenol A are compared to corresponding compositions where the polycarbonate is based on bisphenol A. The former show an increase in weld line strength with increased proportion of the included ABS. In contrast, Examples "a" through "d" that are based in Bisphenol A polycarbonate show a practically constant value for this property. Clearly Serini cannot reasonably be said to have disclosed that weld line strength improves in compositions containing the presently relevant polycarbonate upon the inclusion of graft copolymer such as ABS.

In view of the present amendment the consequent avoidance of Serini, the claims are believed patentable over the cited documents and the application in condition for allowance.

An early indication of the allowability of the claims is earnestly solicited.

Respectfully submitted,

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MARKED UP VERSION OF AMENDMENT REFLECTING CHANGES

2. (Amended) Moulding compositions according to Claim [15] 22, containing 75 to 98 parts by weight of an aromatic polycarbonate A.
3. (Amended) Moulding compositions according to Claim [15] 22, containing graft polymers B) produced by copolymerisation of
- 5 to 95 parts by weight of a mixture of
 - 50 to 95 parts by weight of styrene, α -methyl styrene, styrene with alkyl substitution in the ring, C₁-C₈-alkyl methacrylate, C₁-C₈-alkyl acrylate or mixtures of these compounds and
 - 5 to 50 parts by weight of acrylonitrile, methacrylonitrile, C₁-C₈-alkyl methacrylate, C₁-C₈-alkyl acrylate, maleic anhydride, C₁-C₄-alkyl- or phenyl-N-substituted maleimide or mixtures of these compounds on
 - 5 to 95 parts by weight of rubber with a glass transition temperature of less than -10°C.
5. (Amended) Moulding compositions according to Claim [15] 22, containing component C in a quantity of a monophosphorus compound C.1 and an oligomeric phosphorus compound C.2 having a synergistic effect.
6. (Amended) Moulding compositions according to Claim [15] 22, containing as component C a mixture of 12 to 50 wt.% C.1 and 50 to 88 wt.% C.2.
7. (Amended) Moulding compositions according to Claim [15] 22, containing as component C.1 triphenyl phosphate.
8. (Amended) Moulding compositions according to Claim [15] 22, containing as component C.2 an oligomeric phosphate in which R₄, R₅, R₆ and R₇ represent phenyl groups and X represents a phenylene group.

10. (Amended) Moulding compositions according to Claim [15] 22, wherein component D is used in the form of a coagulated mixture with component B.
14. (Amended) A method of using the composition of Claim [15] 22, comprising making an injection molded article.
17. (Amended) The molding composition of Claim [16] 23, wherein [the diphenol] X conforms to formula (III) and where q is 0.
18. (Amended) The molding composition of Claim [16] 23, wherein [the diphenol] X conforms to formula (IV) and wherein both R⁸ and R⁹ signify hydrogen.
19. (Amended) The molding composition of Claim [16] 23, wherein [the diphenol] X is at least one member selected from the group consisting of compounds conforming to formula (III) where q is 0 and compounds conforming to formula (IV) where both R⁸ and R⁹ signify hydrogen.
20. (Amended) The molding composition of Claim [16], 23, wherein [the diphenol] X is at least one member selected from the group consisting of hydroquinone, resorcinol, 4,4'-dihydroxydiphenyl, 2,2-bis(4-hydroxyphenyl)propane, 2,4-bis(4-hydroxyphenyl)-2-methylbutane, 1,1-bis(4-hydroxyphenyl)cyclohexane, 1,1-bis(4-hydroxyphenyl)-3,3-dimethylcyclohexane, 1,1-bis(4-hydroxyphenyl)-3,3,5-trimethylcyclohexane and 1,1-bis(4-hydroxyphenyl)-2,4,4-trimethylcyclopentane.

As explicitly set forth in 37 CFR, Section 1.12C(1)(iii), last sentence, a marked up version does not have to be supplied for an added claim or a cancelled claim as it is sufficient to state that a particular claim has been added, or cancelled, and this has been so stated in the Amendment.

In particular, in this case Claim 16 has been cancelled and Claims 22 and 23 have been added.